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DATE MAILED: 12/02/2008

### NOTICE OF ALLOWANCE AND FEE(S) DUE

21874 7590 12/02/2008 EDWARDS ANGELL PALMER & DODGE LLP P.O. BOX 55874 BOSTON, MA 02205 EXAMINER

SELLERS, ROBERT E

ART UNIT PAPER NUMBER

1794

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/503 244	09/18/2006	Ymii Ohashi	80345(47762)	7369

TITLE OF INVENTION: COMB-SHAPED EPOXY RESIN AND METHOD FOR PREPARING COMB-SHAPED EPOXY RESIN

 APPLN. TYPE
 SMALL ENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV. PAID ISSUE FEE
 TOTAL FEES) DUE
 DATE DUE

 nonprovisional
 NO
 \$1510
 \$300
 \$0
 \$1810
 03/02/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used for correspondence including d below or directed oth ions.	or tran	smitting the ISSU Patent, advance or in Block 1, by (a							
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										(Signature)
				l						(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVENT	OR		ATTO	RNEY DOCKET NO.	CONFIR	MATION NO.
10/593,244	09/18/2006			Yuji Ohashi		80345(47762)			7369	
TITLE OF INVENTION										
APPLN, TYPE	SMALL ENTITY	IS:	SUE FEE DUE	PUBLICATION FEE D	UE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE		DATE DUE
nonprovisional	NO		\$1510	\$300		\$0	\$1810		0	3/02/2009
EXAM	INER		ART UNIT	CLASS-SUBCLASS	П					
SELLERS, I	ROBERT E		1796	525-523000	_					
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A	ondence address (or Cha 1/122) attached. cation (or "Fee Address 2 or more recent) attach ND RESIDENCE DAT/ ess an assignee is ident in 37 CFR 3.11. Comp	nge of ' ' Indicated. Use	Correspondence ation form e of a Customer		p to nativingle or a attor be p type e pa	3 registered paten ely, firm (having as a gent) and the name neys or agents. If or orinted.	memb es of u no nam	er a 2 p to e is 3 entified below, the d		as been filed for
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NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if requeeords of the United Sta	uired) v tes Pate	will not be accepted ent and Trademark	from anyone other th Office.	an th	e applicant; a regi	stered a	ittorney or agent; or th	e assignee	or other party in
Authorized Signature						Date				
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This collection of inform an application. Confident submitting the completed this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C iality is governed by 35 application form to the ons for reducing this but irginia 22313-1450. DC 13-1450.	FR 1.3 U.S.C. USPT rden, sh O NOT	11. The information 122 and 37 CFR O. Time will vary hould be sent to the SEND FEES OR O.	n is required to obtain 1.14. This collection is depending upon the in Chief Information Of COMPLETED FORMS	or re esti idivi ficei S TO	etain a benefit by the mated to take 12 r idual case. Any co r, U.S. Patent and THIS ADDRESS	ne publ ninutes mment Traden	ic which is to file (and to complete, includir s on the amount of ti- nark Office, U.S. Dep D TO: Commissioner	by the US g gathering ne you requirement of for Patents	SPTO to process) g, preparing, and puire to complete Commerce, P.O. s, P.O. Box 1450,

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



## UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

PO Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/593,244	09/18/2006	Yuji Ohashi	80345(47762)	7369		
21874 75	590 12/02/2008		EXAMINER			
EDWARDS ANGELL PALMER & DODGE LLP			SELLERS, ROBERT E			
P.O. BOX 55874		ART UNIT	PAPER NUMBER			
BOSTON, MA 02	205	1796				
			DATE MAILED: 12/02/2008			

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 380 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 380 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## Application No. Applicant(s) 10/593,244 OHASHI ET AL. Notice of Allowability Examiner Art Unit ROBERT SELLERS 1796 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to . The allowed claim(s) is/are 1-13. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some\* c) ☐ None of the: 1. A Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. T Examiner's Amendment/Comment

/ROBERT SELLERS/ Primary Examiner Art Unit: 1796

of Biological Material

Paper No./Mail Date 18 September 2006

4. ☐ Examiner's Comment Regarding Requirement for Deposit

8. X Examiner's Statement of Reasons for Allowance

Other .

The following is an examiner's statement of reasons for allowance:

The closest prior art to Yamada et al. Patent No. 4,829,105 discloses the modification of an alcoholic hydroxyl group-containing epoxy resin by introducing side chains via reaction with a lactone, cyclic ether or lactam (col. 4, lines 49-53).

The claimed (poly)(acyl)ethyleneimine side chains Y of the comb-shaped epoxy resin of formula (1) of claims 1-6 is not recited, nor are the methods of preparation of claims 7-13 involving the substitution of the secondary hydroxyl group of the epoxy resin with an alkyl or aryl sulfonyloxy group and cationic polymerization of a monomer.

European Patent Nos. 186,523 and 758,662 cited in the Information Disclosure Statement set forth the reaction of an epoxy resin with a polyalkyleneimine and N-alkyl or aryl-substituted aziridines such as ethylene or propylene imine, respectively. However, the claimed comb structure of formula (1) and method of preparation by substitution of the secondary hydroxyl group with an alkyl or aryl sulfonyloxy group are not recited.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

(571) 272-1093 (Fax No. (571)-273-8300) Monday to Friday, 9:30 to 6:00 /Robert Sellers/ Primary Examiner Division 1796